

Related Pending Application	
Related Case Serial No:	09/577,496
Related Case Filing Date:	05-25-00

WHAT IS CLAIMED IS:

1. A coordinates detection apparatus comprising:

a display surface;

two optical units provided at different positions on the  
5 border of said display surface, each of said optical unit having  
a light emitter, a diffusion lens, a read lens, and a  
light-receiver; and

a recursive reflection section located at the border of  
said display surface and which reflects a light emitted from  
10 said light-emitter and diffused by said diffusion lens in a fan  
form towards said light-emitter;

wherein said light-emitter and said light-receiver are  
so located that their optic axes are coincident,

wherein the coordinates of a point specified on said  
15 display surface are detected by focusing the light reflected  
on said reflection section with said read lens, receiving the  
reflected light with said light-receiver, and determining the  
position where reception of the light is hindered.

20 2. The coordinates detection apparatus according to claim  
1, wherein a half mirror is located on the optic axes of said  
light-emitter and said light-receiver.

3. The coordinates detection apparatus according to claim  
25 2, wherein said light-emitter, said diffusion lens, said read

10825 U.S. PTO  
09/764264  
01/19/01

lens, said light-receiver, and said half mirror are mounted in a frame.

4. The coordinates detection apparatus according to claim  
5 1, wherein the center of the light diffused by said diffusion lens and a principal point of said read lens are coincident to each other.

5. The coordinates detection apparatus according to claim  
10 1, wherein said optical unit has a mechanism which optically adjusts said light-emitter and said light-receiver.

6. The coordinates detection apparatus according to claim  
15 1, wherein said optical unit is located at a position close to said display surface.

7. The coordinates detection apparatus according to claim  
1, further comprising:

a mounting position adjustment mechanism which adjust a  
20 mounting position of said optical unit.

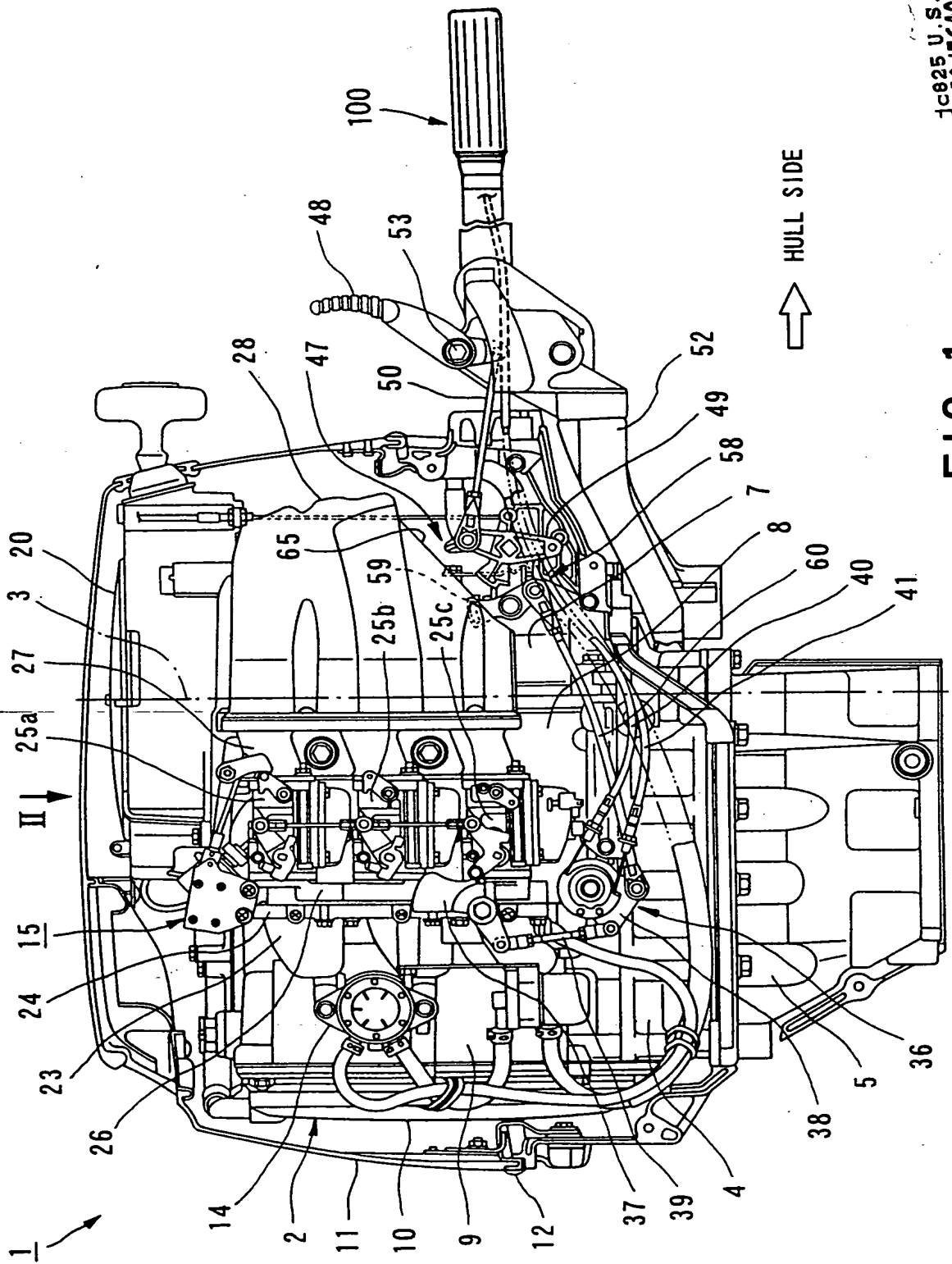


FIG. 1

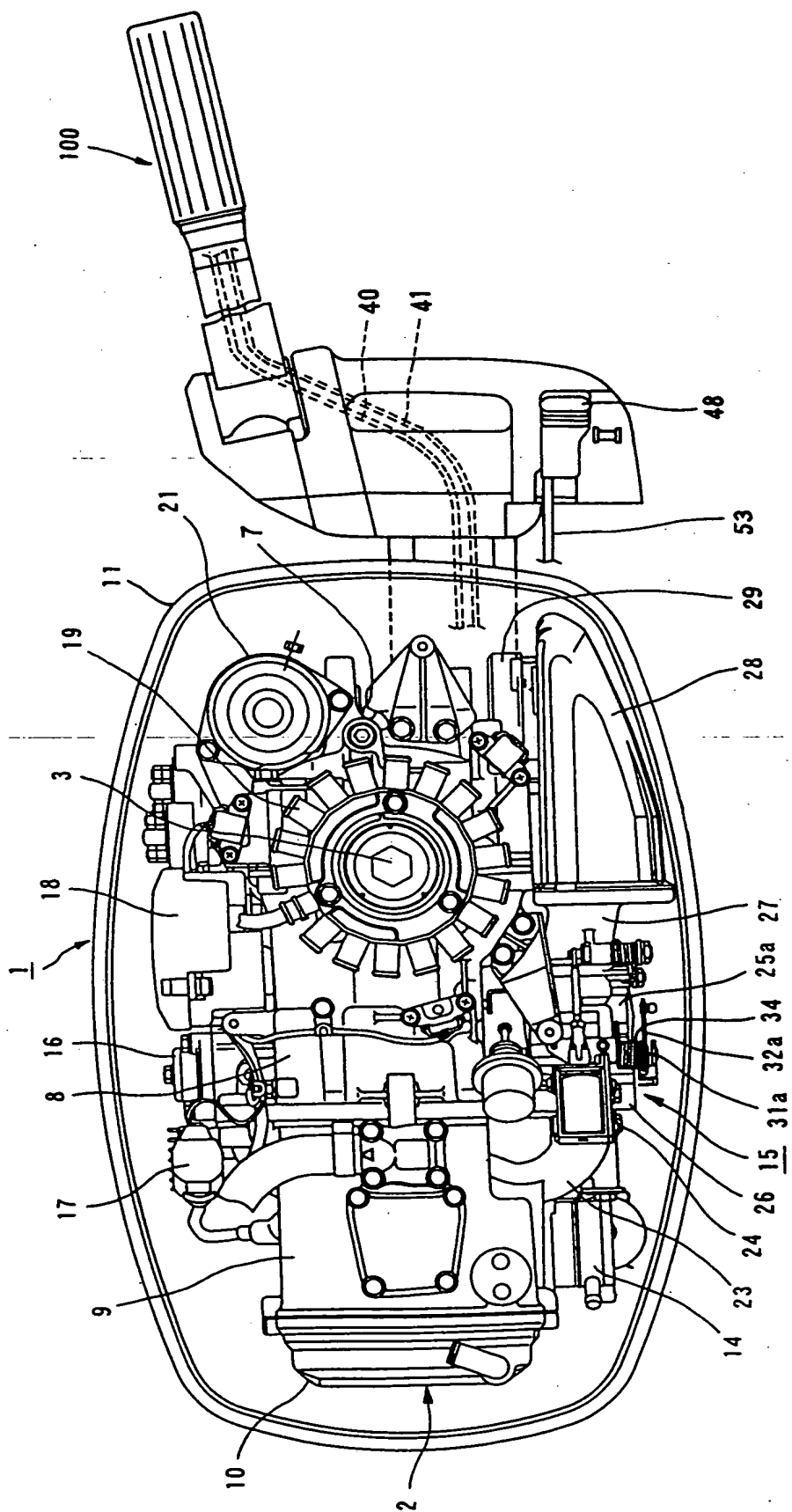


FIG. 2

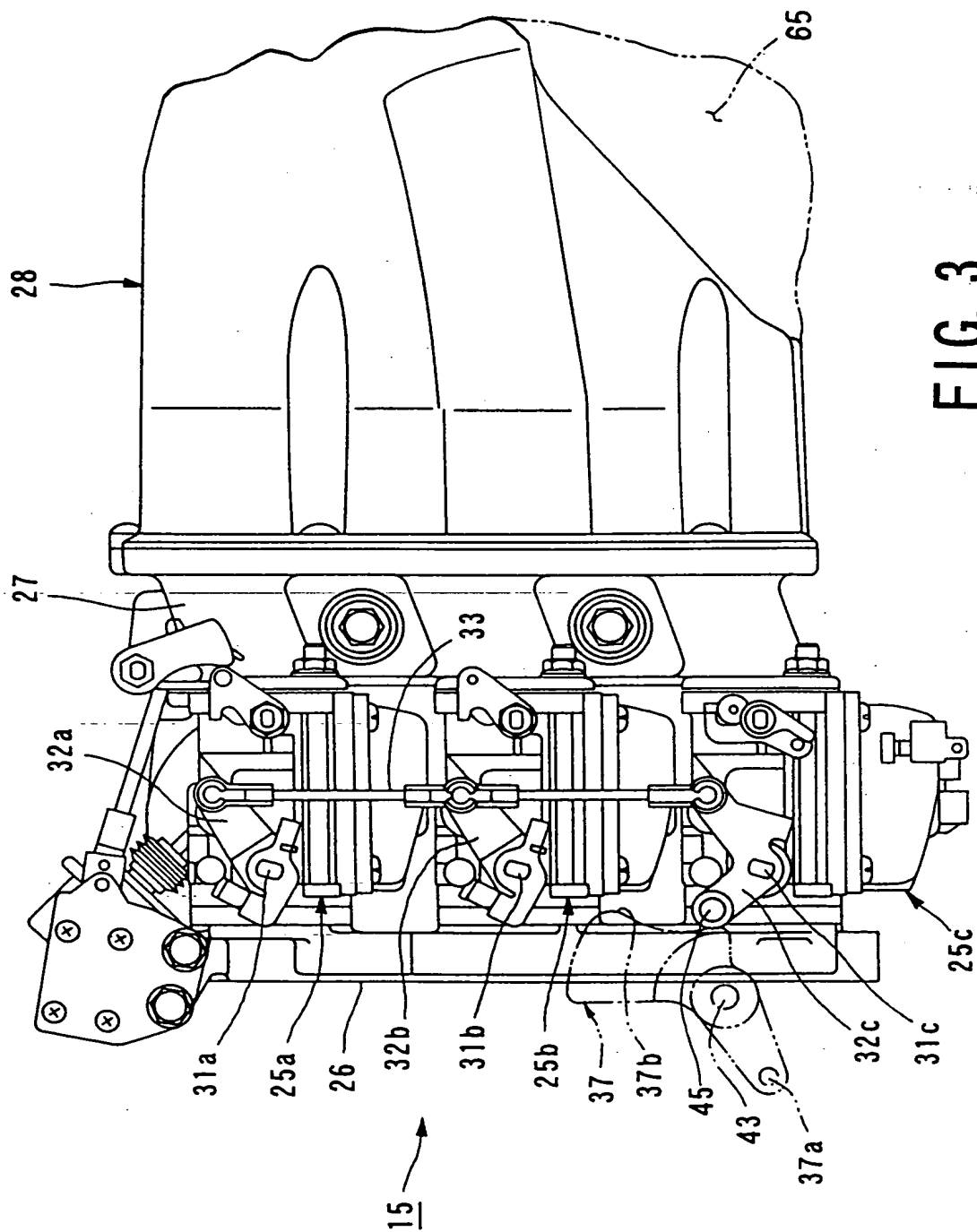


FIG. 3

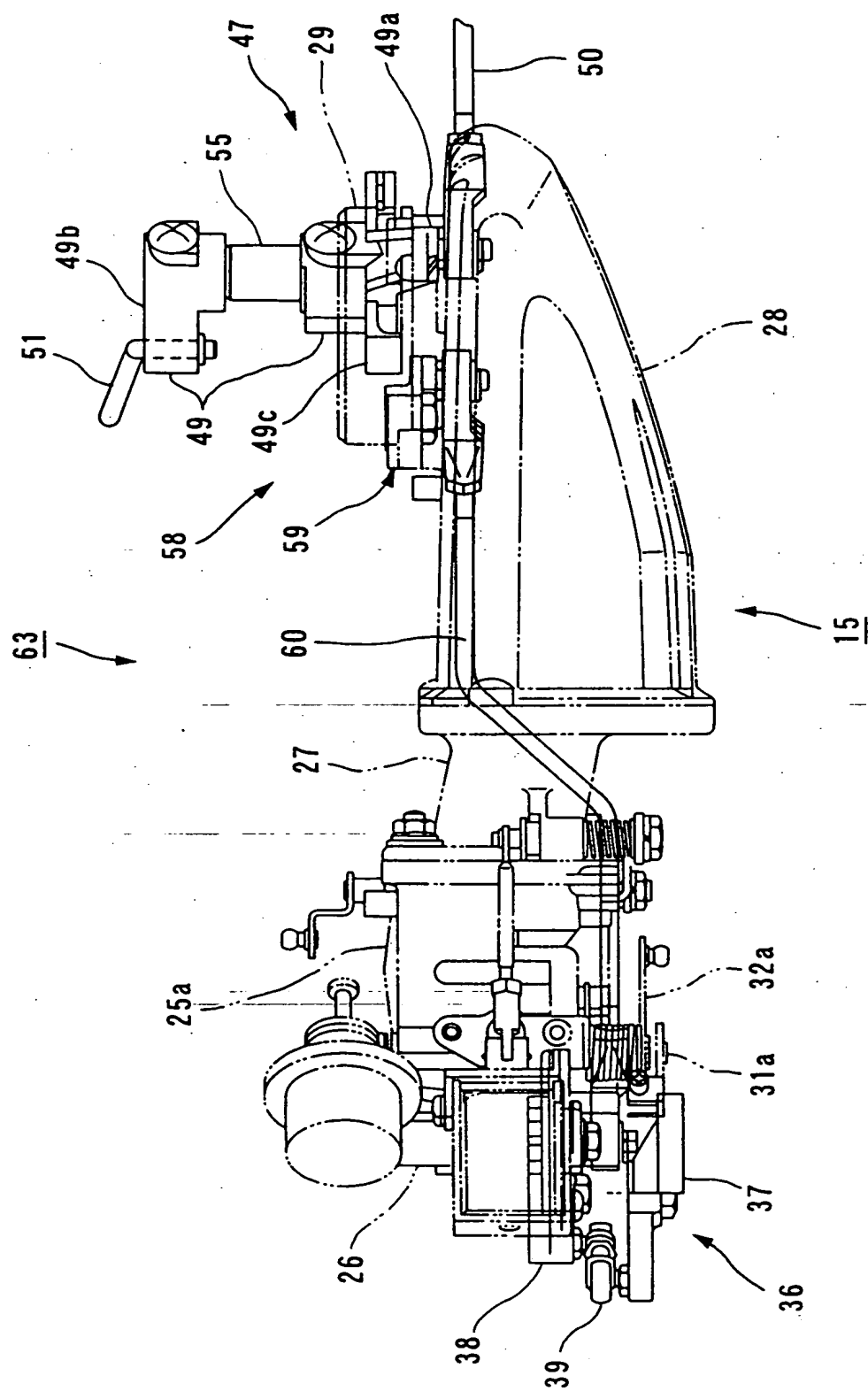


FIG. 4

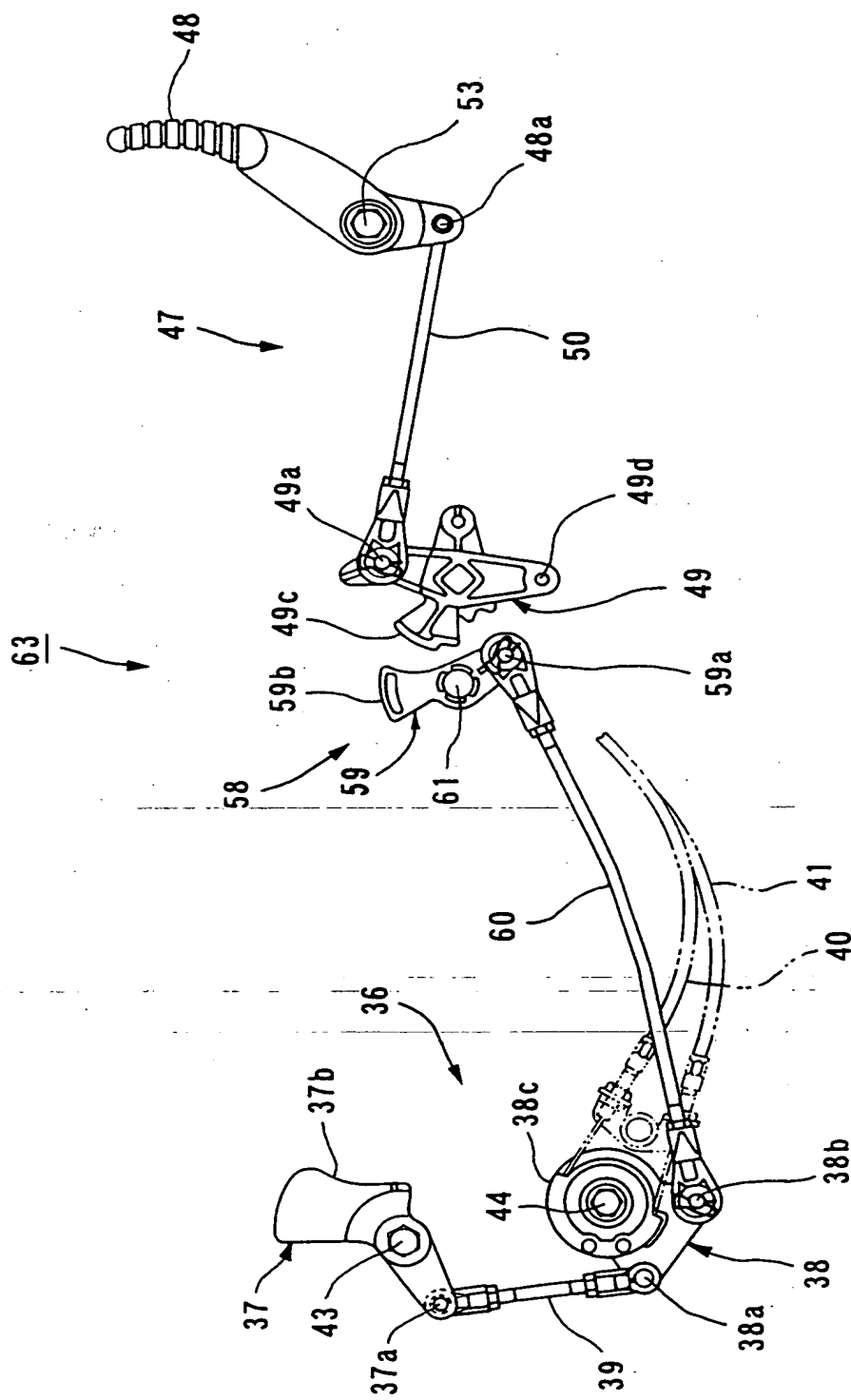


FIG. 5



FIG. 6